

# Overview

## What is your biggest fear?

Failing an asset audit? Loss of intellectual property? Reconciling financial and property records? Not allocating assets to the right initiatives and the right people at the right time? Losing future business? Financial penalties? Buying something you already have?

Other enterprises face these same fears every day. And these days, who can afford waste? But if you have answered "yes" to any of the questions above, complete lifecycle asset management for all your enterprise assets may be the answer.

## **Asset management 101**

Lifecycle asset management is the process of controlling assets throughout their lifecycle by properly allocating them based on enterprise objectives. Think of asset management as a strategic initiative, rather than a tactical task. By capturing the who, what, when, why, how and where for each asset, analyzing and reporting on the diverse information from a central repository, and integrating with other enterprise systems, companies can determine everything they need to know about an asset. In turn, this information is the foundation for optimizing all assets enterprise-wide.

Other critical tasks associated with lifecycle asset management include proper disposal of assets to ensure that all possible revenue is reclaimed including other related assets such as software licenses. In addition, proper lifecycle asset management can mitigate the risks associated or triggered with asset disposal such as hazardous waste, export control technology, the unintended disclosure of trade secrets, or the loss of leased property.

There are many software systems that provide "enterprise asset management" solutions. But most track an inadequate portion of the entire asset base or are only interested in operational or financial pieces. They fail to recognize the substantial investment made by the enterprise in its other assets.

## Government requirements

The Federal Government must effectively manage assets to ensure that scarce public resources are wisely allocated. Congress enacted the Chief Financial Officers Act of 1990, Government Management Reform Act and the Federal Financial Management Improvement Act of 1996 to improve financial management, assign clearer responsibility for leadership, and require new financial organizations, enhanced financial systems, and audited financial reporting. In addition, various federal regulations such as the Code of Federal Regulations (CFR) and Federal Property

Without complete asset visibility, it is virtually impossible to make important financial decisions for enterprise assets.

Management Regulations (FPMR) System, supplement the Federal Acquisition Regulation (FAR) with detailed instructions for handling asset lifecycle events from the time the funds are initially committed by the enterprise for an asset's purchase to the asset's eventual disposal.

The Joint Financial Management Improvement Program (JFMIP) details policies for federal financial and property management systems. Each agency is required to develop and maintain a single, integrated financial management system. To support this objective, agencies should establish policies and procedures for the acquisition, management, and disposal of property. Inventory management systems should be established to track all costs, including contractual costs, of maintaining and selling property. Inventory management systems should also generate management reports, provide controls and monitoring capabilities and summarize information. What this means is that asset management has been elevated from a mundane and thankless task to the very core of the enterprise financial management system.

Federal regulations can also apply to companies who do business with the federal government. The Office of Management and Budget (OMB) has issued several circulars detailing property accounting policies, reporting responsibility and audit procedures.

In most cases, however, these regulations do not impose specific processes on how to conduct proper lifecycle management; merely that companies must comply with regulatory requirements. This results in enterprises having to "make do" with traditional or home-grown systems that are not optimized for the way they must mange and report on their asset base.

#### Process driven

By its very nature, lifecycle asset management lives in a process-driven environment. Consider an asset as it makes its way through the lifecycle.

- Phase 1: The enterprise begins with the specification, procurement and receipt of an asset. Pre-existing assets are repurposed. If an asset must be purchased, new acquisition data is captured in a skeletal record.
- Phase 2: The asset is assigned to the organization and person that will be responsible for that asset. Movement, upgrades and other lifecycle events are captured to enable efficient management and tracking.
- Phase 3: Asset value must be added to the enterprise's balance sheet for depreciation purposes. Transactions that impact the value of assets are capitalized and journalized in the general ledger.

Phase 4: As assets reach the end of their life, they must be repurposed, put into storage for future use, or disposed.

Each of these phases has a plethora of pre-packaged processes, most of which traditional enterprise asset management solutions are simply not equipped to handle.

# The solution - complete lifecycle asset management

These four phases and other critical issues, such as governmentmandated requirements, call for a solution that supports cradle-to-grave tracking of enterprise assets. Examining best practices developed by government organizations that have already adopted and integrated lifecycle asset management have shown these six features are essential:

- 1 Asset management must drive from a set of well-articulated policies and must be practiced for all assets from the time they are acquired until the time they are disposed, commonly known as "cradle-tograve" tracking.
- 2. Organizational, and if possible, personal accountability must be established for each asset.
- 3. The system must be accessible to all enterprise users and provide an intuitive interface.
- 4. Detailed and reasonable verification audit processes must be followed to ensure the system is accurate.
- The asset system must seamlessly integrate with other enterprise applications including Finance, Procurement Human Resources and Directory Services.
- 6. The system must be secure to ensure that sensitive asset information is not revealed to unauthorized users.

#### Cradle-to-grave tracking

Cradle-to-grave tracking ensures that the enterprise can better plan new asset acquisition and reallocate assets that are either already deployed or are not actively used. It also initiates tracking once an order is placed and before an asset is received in the enterprise. This ensures that purchase commitments can be monitored for receipt and cost validation, providing financial control.

Cradle-to-grave also helps prevent the inappropriate or reckless disposal of assets. The transfer of some scientific or technical equipment to foreign bodies is prohibited, equipment subject to hazardous substances must be sanitized, and data contained in computers must be cleansed before disposal. Even computer monitors cannot be sent to landfills. All these instances can be prevented by comprehensive cradle-to-grave asset tracking and management.

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#### Accountability

Establishing accountability for an asset at the department/workgroup and person level has long been viewed as simply a means to mitigate theft. This is accomplished on a tactical level, but, perhaps even more, accountability helps to ensure that the right assets are allocated to the right people and organizational units at the right time.

Accountability minimizes the risk of possible claims after asset disposal. For example, there may be a claim that an asset containing hazardous waste was disposed in a landfill without conducting proper procedures. Having a complete chain of accountability can potentially save millions of dollars in lawsuit or court costs. Network security benefits from accountability as well. Because enterprises know who has been allocated particular equipment, network attacks can be pinpointed and mitigated promptly with less loss to the enterprise.

## Accessibility

To be successful, the system must be securely accessible to all individuals within the enterprise. Web-based distribution and notification of pending events via email systems, as well as an intuitive interface that integrates with and looks like other desktop applications is crucial.

#### Verification audit

Verification, or physical inventory processes, demonstrate the veracity of the asset system's contents. This process is accomplished in a number of ways such as statistical sampling, inventory by exception and electronic inventories. It is critical that an enterprise passes verification audits - failing could mean financial penalties, or worse, loss of jobs. Lifecycle asset management systems must enable enterprises to successfully complete physical inventory audits.

But the benefits of a comprehensive physical inventory process goes deeper. Because accountability has been properly established, users now become an integral member in the review process, rather than a passive participant. The clear benefit is that if employees know they are going to be accountable for assets, they are more likely to protect them. The benefits go to the enterprise too - thefts and loses are discovered sooner because it gives the employee an opportunity to disclose information without fear of reprisal.

# Integration with other enterprise systems

Integrating with other enterprise applications streamlines the asset management process across departments. It facilitates workflow between departments and lessens the manual effort and recordation tasks.

- Order Entry / Purchasing / Receiving Systems- skeletal records are initiated when orders are placed for assets. This ensures that records are complete at physical receipt time and tagging.
- General Ledger / Financial Systems proper production of the
  enterprise's financial statements is supported when all assets are
  capitalized to the balance sheet and automatically decapitalized when
  the asset is disposed. This helps to eliminate the well-known problem
  of continuing to depreciate assets after they no longer exist.
- Human Resources Systems integrating with the human resource system is key to ensuring proper maintenance of personal and organizational accountability. The asset management system is able to automatically recognize new employees and their place in the enterprise so that the proper authorized rights are established. And as employees move through or leave the enterprise, the interface enables the asset management system to reassign or revoke rights to assets. Once employees are no longer with the company, the asset management system will prevent new assets from being assigned to them.

According to the Joint Financial Management Improvement Program (JFMIP), integration is key for successful financial management systems and must include these four characteristics:

- 1. Standard data classifications (definitions and formats) established and used for recording events
- 2. Common processes used for processing similar kinds of transactions
- 3. Internal controls over data entry, transaction processing, and reporting applied consistently
- 4. A design that eliminates unnecessary duplication of transaction entry

# Security

There are two security levels in an asset management system. The database, network and access programs must prevent unauthorized access including internal employees or those attempting to gain access using the Internet. The second level ensures that users only have access to information that directly relates to them or their roles. This prevents unauthorized accountability transfers and interference on what other individuals and organization units may be doing.

An integrated financial management system encompasses the software, personnel, processes and data necessary to carry out and manage financial management functions.

# The Sunflower Solution

Sunflower Assets and Sunflower IT are specifically designed to address the essential requirement of a comprehensive lifecycle asset management system. They significantly improve accurate decision-making by providing cost-efficient and distributed data collection and information dissemination. Sunflower provides a more effective alternative to legacy asset management systems by:

- Helping financial officers to comply with government-mandated property control and accountability requirements
- Enabling better control of existing assets and allocation for future uses
- Integrating seamlessly with other enterprise applications to streamline asset value across departments
- Providing required reporting for regulatory compliance purposes and audits eliminating issues around penalties and loss of future business

#### **Sunflower Assets**

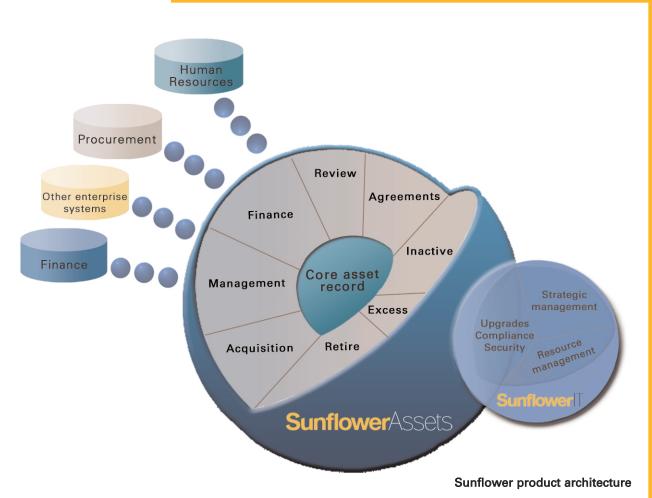
Sunflower Assets helps enterprises to:

- Collect and structure all data needed to maintain an accurate asset inventory and meet government oversight requirements
- Organize data to ensure existing assets are use to their fullest potential
- Automate manually intensive tasks
- Take advantage of current best-of-class business practices while remaining flexible to adapt as those practices change
- Find assets quickly with flexible query capabilities

#### **Sunflower Assets features**

Designed to track all assets including capital equipment and IT assets from acquisition to disposal, Sunflower Assets offers the following features:

- Skeletal records for the asset prior to acquisition. Supplemental information is then entered when the physical item is received.
- A detailed chain of asset accountability at the responsible organizations and people level. Changes in accountability are tracked in a perpetual history record.
- A physical inventory review module that ensures accuracy of the data.
- A comprehensive interface layer allowing Sunflower to integrate with other enterprise applications to optimize lifecycle asset management processes.
- Leverages the security features of Oracle RDBMS.
- User-friendly interface and complete web browser capability so that all employees can participate in the asset management process



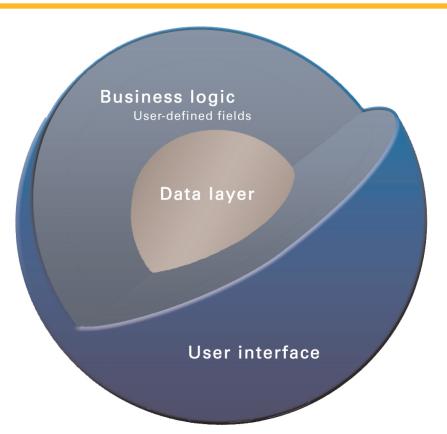
#### **Product architecture**

Sunflower Assets and Sunflower IT are built on the principle of cradleto-grave asset management processes that share the need for a common database. Sunflower's product architecture leverages Oracle technology to take advantage of the robust and scalable database and application server capabilities.

#### Layered architecture

Even though enterprises use best business practices for effective asset management, each may have unique requirements. Sunflower Assets supports these unique requirements through its three-layered architecture; the data layer, business logic and user interface.

The data later is at the center of the architecture and contains the tables and views that the Oracle database uses to store all application data. This layer provides the capability to capture user-defined data. This means that Sunflower Assets collects and consolidates data from other enterprise systems and captures data not located elsewhere. This interface layer houses the integration points between Sunflower Assets



and other enterprise systems without customizing Sunflower Assets or

Sunflower layered architecture

compromising database integrity. Seamless and timely data flow can operate in real-time or in batch mode depending on enterprise requirements. This gives the enterprise a holistic view of their assets and is the system of record for all financial, regulatory and strategic asset management requirements.

The business logic layer completely surrounds the data layer and provides the only way that data can be inserted, updated or deleted. This means that any user interface must obey the same set of data integrity constraints and business rules. Sunflower Assets can supplement transaction processing with user-supplied logic written in industry-standard SQL. This is accomplished by providing pre-and post-transaction hooks, giving users the capability to update or validate data whenever a transaction is recorded by Sunflower Assets.

The user interface layer provides the connection between the user and the business logic. Companies can configure this layer to meet business requirements without modifying the core application.

#### Security

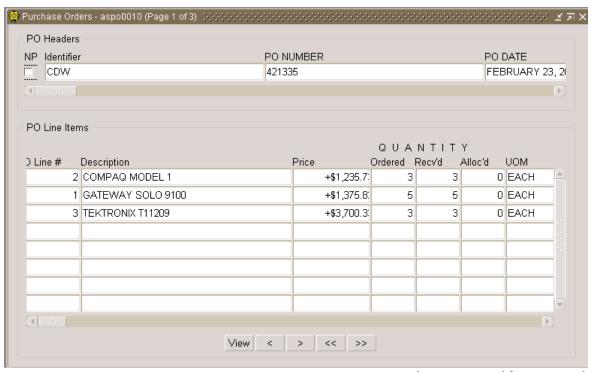
Sunflower Assets supports secure transmission and viewing of data. Authentication, authorization and encryption features make certain that only valid users can view and work on data authorized for their duties or titles. Financial and physical controls are not managed by the same department or person with the "Separation of Duties" function. In addition, Sunflower Assets retains a complete historical record of assets throughout its entire lifecycle. This data is never deleted but is archived when the asset has been retired, minimizing the risk of potential claims.

#### **Deployment**

Sunflower Assets can be deployed in a true "n-tier" architecture which includes a client-server or can be completely browser based. Standard web protocols ensure that data is sent securely and self-service web pages enable all individuals within the enterprise to participate in the management of assets.

#### **Sunflower Assets Modules**

The modular architecture of Sunflower Assets is directly derived from cradle-to-grave asset management best-practices. This architecture is supported by the concept that various groups within the enterprise take a detailed view of the asset in a particular phase of its life. All data is retained in a central asset record and supplemented by interest records as the asset moves through the lifecycle enabling a more global view and historical context.



Assets captured from external purchasing system

## Acquisition module

New asset information can be captured from an external system, such as the purchasing or accounts payable. Newly acquired assets can be automatically released to its responsible organization or held until information has been reviewed by the acquisition personnel. Asset categorization is determined by user-defined business rules and not hard-coded business logic.

## Management module

The Management module facilitates the detailed tracking of the relationship between assets, organizations and people as they evolve over time. After acquisition, each asset receives a location, a responsible individual and organization. Update history, including creator, data and creation time is retained for each asset. In addition, who modified the record as well as date and time are captured for every event. Data security is maintained by allowing only those users who have been given access to an organization's asset data the capability to perform updates on those records. Sunflower Assets integrates with the Human Resources system keeping employee information constantly up to date.

Sunflower Assets accepts data from any type of barcode device and provides a generic interface for recognizing transactions recorded from external applications.

In order to provide for individual and organization transfers, Sunflower Assets uses a request/accept/deny paradigm which ensures that accountability is not transferred without consent of both parties. This permits an organization or individual to request that another organization or individual become accountable for an asset. If the second party agrees to the transfer, the request is accepted and accountability is transferred without further action on the part of the requesting party. If the second party disagrees, the request is denied and the requesting party is notified electronically. The Management module also provides mass update capability in a single transaction.

Organizations can update the responsible individuals of several assets; conversely, a user, who represents multiple organizations, can transfer assets from one organization to another.

#### Finance module

The Finance module automatically creates the debits and credits that capitalize the asset's acquisition code to the balance sheet. This ensures accurate reconciliation because it can work in cooperation with or independently of other financial systems. Subsequent adjustments to an asset's value are automatically sent to the general ledger. In addition, the Finance module automatically calculates the monthly depreciation expense entries. When capital assets are retired, the Finance module generates the decaptializing entries for the ledger. The Finance module also helps to ensure the accurate production of the enterprise's financial statements by automatically generating the capitalizing journal entries for newly-acquired assets, adjustments in value and for retirements.

#### Review module

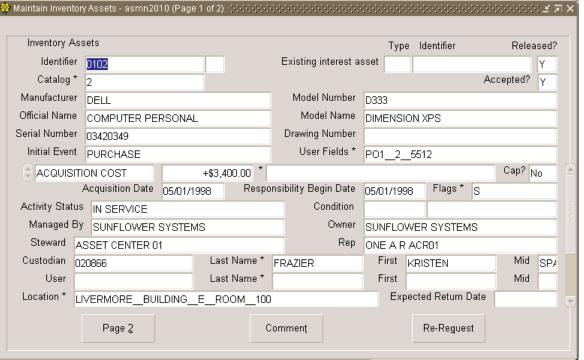
The Review module supports "wall-to-wall" and random sample inventory methods. Business rules that manage how inventory will be conducted, from the criteria that determine the inventory base to the set of acceptable inventory touches, are captured for subsequent processing

and reporting. Sunflower Assets will accept data from any type of barcode device and provides a generic interface for recognizing transactions recorded from external applications. For example, transactions recorded elsewhere, such as the asset receival into excess or the change of an asset's responsible organization, are shown as an electronic inventory touch.

## Agreements module

The Agreements module enables the enterprise to manage assets associated with formal or informal contracts and includes:

- Subcontracts
- Leases
- Warrantees
- Software License Agreements
- Property Passes
- Loans and Borrows



Complete asset information

Sunflower Assets captures the information needed by administrators during the initial phases of an agreement by tracking and tagging assets as they become associated with an agreement. Assets can be associated with multiple agreements, such as a subcontract and a maintenance agreement. Assets can be moved transferred or disposed of as a group at the agreement level. Moreover, Sunflower Assets supports reporting on asset activity by agreement for standard government forms such as the NASA 1018 and DOD 1662.

#### Inactive module

The Inactive module manages storage, stand-by and held-for-future-projects assets, from initial receival, through storage reviews, recharge and redeployment. When an item is received into inactive status, additional data is captured to ensure warehouse space is optimal. Then, based on user-defined criteria, the asset's responsible organization can be periodically invoiced for that space. Tools required by asset managers as they conduct annual storage reviews include a list of the assets to be reviewed, and results and approvals associated with each review.

## **Excess and Disposal module**

The Excess module manages excess assets, from initial excess receival through screening and final disposition. An asset's screening type and period are automatically determined and assigned by Sunflower Assets using a set of business rules. New screening types can be added at any time the screening period for an existing type can be changed, as required. Sunflower Assets promotes the distribution and inquiry of excess asset information by publishing the excess list in web format. This allows the asset manager to make current excess asset information available online to internal organizations or to any organization that has secure online access. Lotting and sales capabilities of Sunflower Assets streamline the excess disposal process by permitting the mass disposition of assets through auction, donation or other user-defined methods. Disposition data can be captured at the lot or asset level for reporting purposes.

"Enterprises can take a cue from government-mandated property control requirements to be more effective in their asset management and allocation initiatives."

leading analyst organization

#### Disposal

Disposal in Sunflower Assets help to ensure that assets are reallocated if possible and disposed of appropriately if not. This disciplined approach to asset disposal is mandatory for Government companies, but translates well to the enterprise especially in today's tight business climate. A disposal cycle is established for each asset that involves advertising asset to an internal audience at specified intervals in hopes of reusing the asset. If the asset cannot be reused the asset is retired and its method of retirement is captured in a perpetual history record.

#### Retirement module

The Retirement module captures the documentation and final transaction that retires an asset from Sunflower Assets. Retired asset information is reserved with complete historical information if needed for later analysis. In some cases, the final disposition transaction can be automatically recorded by Sunflower Assets.

#### Sunflower IT

Sunflower IT supplements Sunflower Assets with detailed IT attribute tracking that follows lifecycle asset management rules. As with all

property and fixed assets, Sunflower IT helps optimize IT investments, reduce costs and improve end-user productivity by providing definitive information about enterprise hardware and software assets. A critical step in an organization's overall asset management initiative, Sunflower IT enables companies to inventory and proactively track distributed IT assets over time.

# Reporting

A complete suite of parameter-driven reports enable strategic and tactical management of all aspects of the asset lifecycle. Over 55 browser-based reports enable users to select the data and sorting criteria which address their specific information requirements. For a more detailed analysis of property data, Sunflower Assets supports all industry-standard SQL-query tools including MS Access, Brio, Business Objects and Microstrategy.

# Implementing Sunflower

Based on the classic "waterfall" development model, the Sunflower Assets Implementation Methodology spans the entire lifecycle of a project - from planning, through to application roll-out and production. This comprehensive approach enables Sunflower to deliver projects with lower cost, reduced risk and shorter time to enterprise roll-out.

The Sunflower Assets Implementation process separates lifecycle development into four major phases. During each phase, we use best practices cultivated from our growing customer base in steering full-lifecycle projects to roll-out and production. For more detailed information, please ask for "Sunflower Implementation Methodology" whitepaper.

## Conclusion

Sunflower Systems delivers the most comprehensive property management and accounting software that significantly improves accurate decision-making. Helping financial officers to comply with government-mandated property control and accountability requirements, Sunflower Systems:

- Enables better control of existing assets and allocation for future uses
- Integrates seamlessly with other enterprise applications to streamline asset value across departments
- Provides required reporting for regulatory compliance purposes and audits eliminating issues around penalties and loss of future business

Sunflower's integrated quality process model framework offers a repeatable process where the core processes of project implementation are coupled with tasks relating to project and quality management.